

REMARKS

Applicants have amended claims 1, 2, 4, 8, 9, and 11-13, and canceled claims 3 and 10, without prejudice. Claims 1, 2, 4-9, and 11-21 are presented for examination.

Claim 1, the only independent claim, recites a medical device comprising an elongated member comprising at least two first coextruded layers comprising a first material; and at least two second coextruded layers comprising a second material having a different stiffness than a stiffness of the first material, wherein at least one of the layers varies in thickness radially along the member, and the first and second layers alternate along a radial direction of the member

Prior to this Reply, claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,030,369 (Engelson) in view of U.S. Patent No. 5,730,733 (Mortier); and claims 2-21, which depend from claim 1, were rejected under 35 U.S.C. § 103(a) as being unpatentable over Engelson in view of Mortier and further in view of U.S. Patent Nos. 5,562,127 (Fanselow) and 6,776,945 (Chin). In particular, the Examiner has relied on Engelson for disclosing a catheter having two coextruded layers, but the Examiner has acknowledged that Engelson does not disclose catheters having four or more coextruded layers. To make up for Engelson's deficiencies, the Examiner has relied on the secondary and tertiary references for disclosing devices with four or more layers. According to the Examiner, because the secondary and tertiary references disclose catheters having four or more layers, increasing or duplicating the number of coextruded layers in Engelson would have been considered obvious.

But none of the references, alone or in combination, describes or suggests a medical device comprising an elongated member comprising at least two first coextruded layers comprising a first material; and at least two second coextruded layers comprising a second material having a different stiffness than a stiffness of the first material, wherein at least one of the layers varies in thickness radially along the member, and the first and second layers alternate along a radial direction of the member, as recited in amended claim 1, the only independent claim.

As acknowledged by the Examiner, Engelson discloses a catheter having two coextruded layers, but Engelson does not disclose catheters having four or more coextruded layers, let alone the claimed coextruded layers.

Mortier does not disclose or suggest a medical device having at least four coextruded layers, as claimed. Referring to Figs. 10B and 10C of Mortier (referred to by the Examiner), Mortier describes a multi-layered catheter 110 having four layers, but the catheter includes layers that are assembled together in a step-wise fashion, not coextruded as claimed. For example, in describing the catheter shown in Fig. 10B, Mortier describes first extruding a layer 124, then applying a braid layer 118 to layer 124, then extruding a layer 126 over braid layer 118, and then extruding or applying an inner lining 120. (*See, e.g.*, col. 10, lines 4-13.) Furthermore, when Mortier does indicate that multiple layers can be coextruded (*see, e.g.*, col. 4, lines 64-65), there is no indication that at least one of the layers varies in thickness axially along the device, as claimed. Moreover, Mortier does not disclose or suggest at least two first coextruded layers comprising a first material; and at least two second coextruded layers comprising a second material having a different stiffness than a stiffness of the first material, wherein the first and second layers alternate along a radial direction of the member.

With regard to Fanselow and Chin, while both references describe tubing having multiple coextruded layers, neither references discloses or suggests varying the thickness of at least one of the layers, for example, to change the performance of the tubing. Rather, each reference proposes other methods of modifying the physical characteristics of the tubing. Chin describes imparting molecular helical orientation to vary stiffness. Fanselow describes selecting layers of certain compositions and/or physical properties to provide a desired performance, but does not disclose varying the thickness of a layer, even though it details the dimensions of the tubing (*see, e.g.*, col. 10, line 33, *et. seq.*). Furthermore, neither Fanselow nor Chin discloses or suggests at least two first coextruded layers comprising a first material; and at least two second coextruded layers comprising a second material having a different stiffness than a stiffness of the first material, wherein the first and second layers alternate along a radial direction of the member.

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Page : 7 of 7

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Thus, even if the references could be properly combined, which Applicants do not concede, the resulting combination would not be covered by the claims, as amended. In light of the above amendments and remarks, Applicants request that the rejections be withdrawn.

For at least the reasons discussed above, Applicants believe the claims are in condition for allowance, which action is requested.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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